

NOAA Fisheries, Pacific Islands Fisheries Science Center Lobster Research Plans: 2008

Pursuant to a court order this document describes the NOAA Fisheries, Pacific Islands Fisheries Science Center's (PIFSC) plans for NWHI lobster research in 2008. Descriptions are provided for only the field component of the research plans, as instructed by the court, and include the annual NWHI lobster resource survey and research charters.

1. NWHI Spiny and Slipper Lobster Research Charter

In 1998 a spiny lobster tagging experiment was implemented at Necker Island to provide independent estimates of population size and updated estimates of population dynamics parameters. Approximately 6000 spiny lobsters were tagged and released at Necker Island and about 320 tagged lobsters were recaptured during the 1999 NWHI commercial lobster fishery. The experiment prematurely ended in 2000 due to funding shortfalls, but was reinitiated in 2002 using research charters. In 2002, two vessels were chartered to conduct the tagging experiments at Necker Island. Each year since 2002 two vessels have been chartered to continue the tagging experiments. In 2003 the scope of the project increased and lobster tagging research was initiated at Maro Reef. The project expanded further in 2006 when tagging began at Gardner Pinnacles and Laysan Island. To date, over 51,000 spiny lobsters and 27,000 slipper lobsters have been tagged at Necker Island, Gardner Pinnacles, Maro Reef and Laysan Island. Preliminary examination of the recapture data indicates significant variability in life history parameters important for stock assessment and ecosystems models. Additional tag and recapture data are necessary to advance our lobster population models and determine their status in the NWHI ecosystem.

The PIFSC plans to continue the Necker Island, Maro Reef, Gardner Pinnacles, and Laysan Island lobster tagging experiments in 2008 using no more than two research charter to provide tagging and recapture data for parameter estimation. Fishing vessels will be chartered to fish approximately 300 traps per day at Necker Island, Maro Reef, Gardner Pinnacles, and Laysan Island. Data on carapace length, sex, and reproductive condition will be collected from each lobster caught, as well as spatial position of the traps by biological technicians. The vast majority of lobsters caught during the 2008 research charter will be returned alive to the sea floor. A small number (200) may be brought back to the laboratory for further processing.